

## **RE: Response to Public Comments**

On May 19, 2021 and June 10, 2021, the Boston Conservation Commission (the Commission) held public hearings on the proposed administrative and procedural regulations under Boston's Local Wetlands Protection Ordinance (the Ordinance). These regulations were drafted pursuant to the authority granted to the Commission under the Ordinance, which gives the Commission the ability to further effectuate the purposes of the Ordinance to better protect the wetlands and related water resources within Boston by controlling activities affecting the resource areas.

The regulations proposed under the Ordinance will be broken out into stages. This is the second phase of the regulations and focuses on wetland resources that are either not protected under state law, or do not have any standards for projects to follow. The goal is to create a set of performance standards that projects must follow to protect and preserve these resources.

Phase II of the regulations cover isolated vegetated wetlands, which are wetlands that are not next to open water, vernal pools and vernal pool habitat, which are small depressions that seasonally fill with water, and land subject to coastal storm flowage, which is the same as the 100-year floodplain.

At the hearing on June 10, 2021, the Commission voted to begin a final thirty (30) day comment period on the proposed regulations. The official comment period began on June 30, 2021 and ended on July 30, 2021. Public comment was also provided and discussed during the hearing and is organized by section below.

### **Comments with Specific Requests to Alter Language:**

Comment: We recommend that Section XVII.C.2 of the Regulations be modified to eliminate references to “expected” and “anticipated” conditions (as opposed to existing conditions), and that the Regulations also be modified to allow an applicant to initiate a mapping review process based on current conditions, as follows: “...The commission shall presume that the 100-year storm is that which is designated as the Area of Special Flood Hazard by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for Boston. If such data is unavailable or deemed by the Commission (including based on submission by the applicant) to be outdated, inaccurate, or not reflective of the current, or reasonably anticipated conditions, the boundary of the LSCSF may be determined from other evidence, including the best available data provided by the City or the

Commonwealth of Massachusetts, or by engineering calculations completed by a registered professional engineer on expected conditions due to climate change.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: We recommend that the Commission revise the language [in Section XVII.E.11] to add underlined language as follows: “...within an ACEC, **unless such work or activity is demonstrated to have no significant adverse effect on the ability of LSCSF to protect the ordinance values.**”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: We request that the following sentence be added to Section XVII.E.9. viii of the draft regulations: “**Projects that employ flood mitigation measures designed and intended to have no significant adverse effect on the ability of applicable LSCSF areas to protect from storm damage and flood control.**”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: States that the definition of ‘competent source’ in Section V is “Overly broad – not all entities have expertise in all of these areas. Why does this need to be defined? If keeping definition, need to add info for entities outside the City?”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: Request that Section XIV.B.2 be updated to “**Allow for updates from MassDEP**”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: “Add: ‘**Except where the disturbance occurred prior to the effective date of these regulations**’” at the beginning of XIV.B.3

- Response: Staff recommends that this be incorporated into a revised draft.

Comment: “Add: ‘**Notwithstanding XIV.D.2...**’ to the beginning of XIV.D.4”

- Response: Staff recommends that this be incorporated into a revised draft.

Comment: In XIV.D.6., which reads “Where the Commission permits work or activity in a resource area”, argues that “This should be **limited to IVW here** since this is the IVW section of the regs.”

- Response: Staff recommends that this be incorporated into a revised draft.

Comment: In XV.A, change “Filling of Vernal Pools causes lateral displacement” to “**‘may cause’ - it won’t always result in displacement onto contiguous properties as currently stated.**”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In XV.B.8., change “any area” to “**a confined depression.**”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: Also in XV.B.8, **“Replace ‘and shall be investigated’ with ‘unless/until demonstrated otherwise by investigation’”**

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: At the end of XV.D.5, **“Add ‘or other options per XIV.D.2iv’ (or is the intent that only on-site can be restored b/c vernal pool)?”**

- Response: The Regulations only permit on-site replication as drafted.

Comment: In XV.D.7, **change “on the site and surrounding resource areas to “...on the impacted vernal pool and vernal pool habitat.”**

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In XVII.B.3, **“Add ‘to the extent applicable’”** before “The NOI shall propose specific mitigation...”; **“add ‘including but not limited to’”** before “...employing such strategies and details as are suggested through the Climate Ready Boston initiative...”; and **strike the “and”** and **“add ‘...and/or protect properties from flooding’”** after “prevent the lateral displacement of storm or flood water to surrounding resource areas or properties.”

- Response: Staff recommends the **“add ‘including but not limited to’”** portion of this comment be incorporated into a revised draft.

Comment: In XVII.E.5, **change “which may” to “...so as to...”** Should be permitted if no negative impact. There may be cases where channelized flow is desirable, to get the floodwater out of an area before the next input. Use the language ‘unless demonstrated no adverse effect’?”

- Response: Staff would recommend this comment be incorporated into a revised draft.

Comment: in XIV B - As NAIOP has repeatedly stated over the past two years, from legislative discussion to implementation, transition rules are critical to ensuring the success of this Ordinance and accompanying regulations. As such, NAIOP respectfully requests that (B)(3) be amended to include the following language at the beginning of the section **“Except where the disturbance occurred prior to the effective date of these regulations...”**

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: NAIOP urges the Commission to adopt the [following change] to [XIV.D.5]: **The limited project provision should be expanded to address the oversight and reference the coastal regulation limited projects at 310 CMR 10.24(7)(a-c) as well as the inland regulations at 310 CMR 10.53.**

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: NAIOP urges the Commission to adopt the [following change] to [XIV.D.5]: The singular reference to Section XIV(D)(1) in the “notwithstanding” is confusing. The exception should apply to XIV(D) in entirety to remove any confusion that the purpose of the limited project provision is to allow certain activities in IVW as a matter of public policy that do not otherwise conform to (D)(1-12). Note that (D)(8) prohibits activities, including limited projects which will have an adverse impact on endangered species habitat.

- Response: Staff recommends this section be clarified in a revised draft but notes that the intent of the provision is to allow work without replication or restoration notwithstanding the prohibition on alteration in Section IV(D)(1)

Comment:in Section XV.A - NAIOP respectfully suggests that the Commission consider slightly adjusting the language found in the first paragraph of the preamble, as reflected in red here, to ensure it is accurately captured that lateral displacement is not always a result. Vernal Pools are significant to the Ordinance’s protected interests of flood control and storm damage prevention because they serve as a ponding area for run-off or high groundwater that has risen above the ground surface. Vernal Pools provide temporary storage area where run-off and high groundwater pond and slowly evaporate or percolate into the substrate. Filling of Vernal Pool ~~causes~~*may cause* lateral displacement of the ponded water onto contiguous properties, which may in turn result in damage to said properties.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: in Section XV.D - In order to provide clear consistency and clarity in these regulations, NAIOP suggests that the language found in (D)(7) *“for the entire design life of the project” be changed to “50 years”*. NAIOP also urges the Commission and Staff to review the full body of the draft regulations and standardize all references from “entire design life of the project” to “50 years”.

- Response: Staff recommends that this comment be incorporated into a revised draft.

## Comments on IVWs

Comment: Limiting the loss of IVW to 50% may result in insignificantly small wetlands. If that limitation remains, clarification is warranted as to whether it relates to each individual IVW, or the combined areas of multiple IVWs if present.

- Response: This comment appears to refer to Section XIV(D)(2) which requires a 2:1 replacement for an alteration.

Comment: States that the phrase “IVW are areas where groundwater discharges to the surface and where, under some circumstances, surface water discharges to the groundwater” (Section XIV.A) “doesn’t address IVWs that may exist due to confining layers (bedrock, clay etc.)

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In Section XIV.A in response to “IVW vegetation provides shade, which moderates water temperatures important to fish life,” argue that “IVWs would not be shading fisheries.”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: Argues that XIV.B.2.i.c, “the Commission determines that sole reliance on wetland plants will yield an accurate delineation,” “seems inappropriate” and asks “what is this trying to capture?”

- Response: This provision is taken direction from 310 CMR 10.00 under the regulations for BVW. Staff does not recommend that this provision be removed from the regulations.

Comment: Argues that the presumption in XIV.C (“Where a proposed activity involves the removing, filling, dredging, building upon, over or under, degrading, discharging into, or otherwise altering or posing a significant threat to alter an IVW...”) “should be limited to work within the buffer zone to the IVW being altered.”

- Response: The reference is to the proposed activity within an area subject to protection and language is taken from Section c. of the Ordinance.

Comment: In XIV.D.2, asks “Why limit to 50%? Seems arbitrary. Could result in senselessly small IVWs. Also, if keeping, clarify whether it is 50% of each individual IVW, or 50% of all the combined area of all IVWs on a site”

- Response: This comment refers to Section XIV(D)(2) which requires a 2:1 replacement for an alteration and would apply separately to each IVW as written.

Comment: In XIV.D.2.iii., which reads “the overall horizontal configuration and location of the replacement area shall be similar to that of the lost area,” asks “What does this mean in practice for an IVW? The BVW standard this is mirroring is in relation to Bank, which IVWs don’t border.”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: States that XIV.D.2.v., which reads “at least 75 percent of the surface of the replacement area shall be reestablished with indigenous wetland plant species of the lost area within three growing seasons...” “won’t be appropriate in all situations. There may be IVWs completely dominated by invasives. Or there could be an opportunity to enhance wildlife habitat with different plantings than what are presently in an IVW.”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In XIV.D.5.iii., which reads “alteration of said portion will not remove the IVW from jurisdiction,” asks “if ‘lost’ per the intro to 5, then would no longer be wetland and therefore is not jurisdictional? Or is this intended to address changes in veg. Community (e.g. forested vs. scrub shrub vs. meadow)?”

- Response: Staff recommends that this section be clarified in a revised draft.

Comment: Argues that XIV.D.6 “shouldn’t address non-IVW areas - Buffer Zone requirements should be addressed in a separate section, so that readers don’t miss an applicable requirement (eg folks might not read the IVW section if they are only working in the buffer zone)”.

- Response: Staff recommends that this section be clarified in a revised draft.

Comment: Also in XIV.D.6, asks, “Should there be a minimum threshold identified, below which this would not be required (eg list unique tree species, specify extent of clearing, and/or a # of trees)?”

- Response: The Commission has strongly expressed a need to require the replacement of all trees lost through a permitted alteration and Staff would not recommend establishing a minimum allowable capacity without replacement. The section as written has been reviewed and is supported by the Boston Parks & Recreation Department (BPRD), which is actively working on an Urban Forestry Plan.

Comment: In XIV.D.10.ii., which references 310 Code Mass. Regs 10.53(3)(1), argues that “the limited project cited is for water dependent uses; why restrict this allowance to that? Why not include all limited projects?”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: The WPA, which does not regulate IVW, has a provision for a limited project approval of the fill of Bordering Vegetated Wetlands (BVW) necessary for access to property or other instances. **NAIOP recommends that the Commission consider the application of the limited project provisions under the WPA for the isolated wetlands in the event that alteration of a small drainage area or swale with vegetated wetlands is necessary for access or other public purposes.**

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: NAIOP would encourage the Commission to have flexibility in restoration, replacement or replication of the altered wetlands on-site or off-site to provide the Commission and applicants with a range of options that may be limited in certain urban areas. While fill of BVW and isolated wetlands does not occur on a regular basis, NAIOP **urges the Commission to ensure that it has flexibility to encourage restoration, replacement or replication which enhances the protection of the interests of the Ordinance to take place within the watershed or the general reach of the wetland area.** Since isolated wetlands are not bordering on a water body and may not have the traditional hydrologic connection that BVW has, considering off-site solutions may benefit a wetland system.

- Response: Section XIV(D)(2)(iv) allows the Commission to permit off-site replication of an IVW.

Comment: in Section XIV.A - The current language found in paragraph three of the preamble, reading, “IVW are areas where groundwater discharges to the surface and where, under some circumstances, surface water discharges to the groundwater,” does not address IVWs that may exist due to confining layers of bedrock, clay, etc. NAIOP urges the Commission to adopt language including these additional circumstances.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: in Section XIV.A - To ensure clarity, NAIOP suggests that the last paragraph of the preamble be moved up to the end of paragraph five of the preamble so that the related text can be read together.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: Section XIV B - NAIOP hopes the Commission will consider including language in (B)(2) that allows for updates from MassDEP regarding plant listings found in U.S. Fish and Wildlife Service National List of Plant Species That Occur in Wetlands: Massachusetts 1988, and the subsequent publication as condensed by the Massachusetts Department of Environmental Protection, Division of Wetlands and Waterways, April 1995.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: in Section XIV.B - NAIOP respectfully requests clarification regarding the inclusion of (B)(2)(i)(c) – it is unclear to the reader what the inclusion of this subsection is attempting to capture.

- Response: This provision is taken direction from 310 CMR 10.00 under the regulations for BVW. Staff does not recommend that this provision be removed from the regulations.

## **Comments on Vernal Pools**

Comment: It appears that fill/loss of functioning vernal pools would be permissible. We have included commentary in the attached annotated document not only requesting clarification as to what is allowed as well as the goals of replication, but also noting that allowing loss of functioning vernal pools may not be appropriate, whereas impacts to vernal pool habitat may be appropriate to allow if there is a demonstration that there will not be a significant impact to the vernal pool's functioning.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In XV.A, which states that “Most of the amphibians that rely on Vernal Pools remain near the breeding pool...” notes that this “Depends on one’s consideration of what ‘near’ constitutes, some travel upwards of 300’ away. What is the intent of including this info?”

- Response: It is part of the general preamble and provides further clarification for the establishment of vernal pool habitat. According to the Metropolitan Conservation

Alliance Technical Paper Series No. 5, Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States, “the critical terrestrial habitat extends 650 feet beyond the upland edge of the vernal pool envelope (i.e. 750 feet beyond the edge of the pool). Additionally, the Environmental Protection Agency recommends managing a 1000 foot radius area beyond the edge of a vernal pool basin as vernal pool upland habitat (Brown and Jung 2005).

Comment: In XV.B.1.ii., asks that the definition of Vernal Pool “specify that a pool would need to be ‘certifiable’ eg - it meets the criteria for certification, even though not certified.”

- Response: The depression or basin must only meet the definitional requirements established in the Ordinance for it to be considered a vernal pool.

Comment: In XV.B.3., asks “What does this section add? What is it’s intent? #1 above already addresses that it is a confined basin or depression.”

- Response: This section provides further clarification.

Comment: Regarding XV.D.4, “There seems to be an inconsistency with D2 and this section. Can the ConCom allow ‘loss; (eg fill), or not? D2 says can’t impair capacity of vernal pool to provide wildlife habitat, but this section speaks to a ‘lost area’, in which case wildlife habitat would be impaired? Suggest clarifying the intent of what if any impacts to vernal pools are allowed, and then ensuring consistent terminology (‘lost’ vs. ‘impacted’). Note: based on past experience, MassDEP has treated uncertified (but certifiable) vernal pools as Outstanding Resource Waters - which essentially can’t be filled per 401 WQC (w/o variance). It seems that impacts to certifiable vernal pools should not be allowed; but impacts to vernal pool habitat may be appropriate to allow if demonstrate won’t impact the pool’s functioning.”

- Response: Staff recommends this comment be incorporated into a revised draft.

Comment: Also in XV.D.4, “Specify the goals of restoration. Add sections about native plant cover and maintaining sufficient hydroperiod for use by vernal pool species?”

- Response: All restoration/replication provisions should be included in the restoration/replication section of the Regulations.

Comment: Regarding, XV.D.4.iv, “unclear what the intent of this is in practice. What if vernal pool is eliminated by impacts? Seems this is taken from the WPA BVW standard, which ties to bank and makes sense in that context, but not here for vernal pools?”

- Response: Staff recommends this comment be incorporated into a revised draft.

Comment: Regarding XV.D.4.vii, note that “The Act doesn’t contain provisions for vernal pool replication to our knowledge.”

- Response: Provision intended to refer to general replication criteria that may be contained within the Ordinance, Act, or related regulations and performance standards.

Comment: In XV.D.4.viii, in regards to “near the end of each growing season,” ask “Why this timing? Presumably the intent of vernal pool replication is to create habitat, which is best evaluated during vernal pool species’ breeding season.”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In XV.D.6, offer the “same comment as in similar IVW section, regarding setting a minimum for clarity.”

- Response: The Commission has strongly expressed a need to require the replacement of all trees lost through a permitted alteration and Staff would not recommend establishing a minimum allowable capacity without replacement. The section as written has been reviewed and is supported by the Boston Parks & Recreation Department (BPRD), which is actively working on an Urban Forestry Plan.

Comment: In regards to “for the entire design life of the project” in XV.D.7, note that “Throughout these regs both this phrasing (entire project design life) and 50 years are used. Suggest being consistent with the 50 year horizon throughout.”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: “Incorporate [XV.D.8] into 7 so clear that it is only in relation to impacted vernal pools/habitat.”

- Response: All of the performance standards in Section XIV(D) are only applicable to Vernal Pools & Vernal Pool Habitat.

Comment: A Better City supports the definition of vernal pools that aligns with the Wetlands Protection Act. However, we request additional clarity around the anticipated timeline for measuring the impact of development projects on vernal pools in Boston. While the Ordinance references that, “the applicant shall take into consideration the impacts of climate change on Vernal Pool and Vernal Pool Habitat and integrate climate resilience and adaptation strategies to protect the resource area and properties adjacent to said area for the entire design life of the project,” A Better City suggests more clarity, since design life can be subjective. Instead of “design life” we would suggest the clarification of a 50-year timeline throughout these regulations.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: NAIOP suggests that (B)(2) be aligned with the Ordinance as there is no reference to a Vernal Pool Habitat in the Ordinance. The buffer zone to vernal pools is 100ft from the “highest extent of flooding”, according to the Ordinance. References in the entire Section XV should be to “Vernal Pool Buffer Zone” rather than “Habitat” to correctly align with the Ordinance.

- Response: Section g(xiv) of the Ordinance states “The Commission shall presume that all areas meeting the definition of vernal pool, including the adjacent area known as “vernal pool habitat”, perform essential habitat functions.” According to the Metropolitan Conservation Alliance Technical Paper Series No. 5, *Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States*, “the critical terrestrial habitat extends 650 feet beyond the upland edge of the vernal pool envelope (i.e. 750 feet beyond the edge of the pool). Additionally, the Environmental Protection Agency recommends managing a 1000 foot radius area beyond the edge of a vernal pool basin as vernal pool upland habitat (Brown and Jung 2005). As the Ordinance sets the buffer zone at 100 feet, the buffer zone is presumed to be vernal pool habitat.

Comment: in Section XV.D - NAIOP requests that the Commission consider including language in (D)(4) that clarifies the intent of what and if any impacts to vernal pools are allowed, and then reviewing the entirety of Section XV to ensure consistent terminology (i.e., “lost” vs. “impacted”).

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: in Section XV.D - NAIOP also believes that these regulations would be strengthened by including goals for restoration in (D)(4) and then adding subsections to (D)(4) that include native plant cover and maintaining sufficient hydroperiods for use by vernal pool species.

- Response: All restoration/replication provisions should be included in the restoration/replication section of the Regulations.

Comment: in Section XV.D - NAIOP hopes the Commission will consider striking (D)(4)iv given it appears to be taken from the WPA’s bordering vegetated wetlands (BVW) standard, which ties to the bank and does not make sense in the drafted context for applicability to vernal pools.

- Response: Staff recommends this comment be incorporated into a revised draft.

Comment: in Section XV.D - NAIOP would appreciate clarity from the Commission and staff relating to the language “near the end of each growing season” found in (D)(4)viii. Presumably, the intent of vernal pool replication is to create habitat, which is best evaluated during vernal pool species’ breeding seasons.

- Response: Staff recommends that this comment be incorporated into a revised draft.

## **Comments on LSCSF**

Comment: The draft LSCSF regulations go beyond the limits of the resource area with references to future floodplain conditions. The future floodplain consists of the Coastal

Flood Resilience Zone resource area, which we understand will be defined with associated performance standards in the forthcoming Phase III regulations. We urge the Commission to limit the LSCSF section of these Phase II regulations to the present-day floodplain.

- Response: The Regulations, as drafted do not extend LSCSF to areas that will be part of the Coastal Flood Resilience Zone but require a consideration of the potential future base-flood elevations for areas currently within LSCSF.

Comment: In XVII.A, highlighted “protection of wildlife and wildlife habitat” and noted “Specify that the following LSCSF areas do not provide wildlife habitat (taken from WPA, or reference that WPA section 310 CMR 10.57(1)(a)(3). Except for those portions of which have been so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated (such ‘altered’ areas include paved and gravelled areas, golf courses, cemeteries, playgrounds, landfills, fairgrounds, quarries, gravel pits, buildings, lawns, gardens, roadways (including median strips, areas enclosed within highway interchanges, shoulders, and embankments), railroad tracks (including ballast and embankments), and similar areas lawfully existing as of the effective date of these regulations”

- Response: The Ordinance allows the Commission “to protect additional resource areas, **for additional values**, with additional standards and procedures stricter than those of the Wetlands Protection Act...” Staff agrees that it may be appropriate that some, but not all, of the indicated altered areas should be included in a revised draft.

Comment: In XVII.B.3, argued that “the site and surrounding resource areas” “should be limited to LSCSF”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In response to the Commission’s filing guidelines referenced in XVII.B.3, asked “Will updates to these be subject to public comment?”

- Response: The Commission’s filing guidelines will be modified based on updates to the Regulations and incorporated into a final vote to approve the Regulations.

Comment: In XVII.C.2, argue that “Overlay broad - should be tied to ‘based on documented observations of greater flooding extents during a 100-year storm or engineering study in accordance with the WPA.”

- Response: This section directly cites the Ordinance.

Comment: In XVII.E.8, highlighted “interruptions in the supply of sediment to other wetland resource areas and asked “What is the thought behind this? Clarify - since sediment sources are not good for all resource area types.”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In XVII.E.9, noted a reference to Section XVI(e)(1) through (8) which “should be XVII throughout”.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In response to XVII.E.11, “Even more so than in the other IVW and NP sections, this is particularly problematic bc of the extent of LSCSF. There could be properties entirely within LSCSF and ACEC. Also, this doesn’t consider that there are existing degraded/developed areas (and F.3 doesn’t exclude this section for redevelopment). Allow demonstration of no adverse effect/mitigation of impacts.”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In response to XVII.E.12, “Recommend deleting 12. Why not allow the referenced project types in ACEC (limited projects, beach nourishment, restoration projects, walkways for shoreline access, improvements to maintain/improve existing structures, etc)? Seems that disallowing these would be detrimental overall, including in some cases to resource areas.”

- Response: Staff would not recommend removing this provision but would recommend that the comment be incorporated into a revised draft.

Comment: In XVII.F.1, highlighted “previously developed or degraded” and asked “how is this defined?”

- Response: Staff recommends this comment be incorporated into a revised definition of redevelopment.

Comment: In response to XVII.F.3, “We don’t follow this - summarizing the references seems to leads to: Notwithstanding that the ACEC prohibition supersedes other allowances for work in LSCSF, the allowances, requirements, ACEC prohibition, and rare species prohibition apply to redevelopment?”

- Response: The comment accurately interprets the provision.

Comment: In Section XVII.A - Much of the preamble is providing information that, while true, is generally not applicable to the City of Boston. This is an opportunity to tailor regulations to conditions on the ground. **NAIOP recommends focusing instead on how LSCSF predominantly presents and functions in the City of Boston.**

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In Section XVII.A - It should be clear in all parts of the regulations that assumption that LSCSF is significant to any or all interests of the Ordinance is rebuttable. **This can be accomplished by stating that LSCSF “may be significant” to the interests.**

- Response: Section XVII (D) establishes the presumption of significance and allows it to be rebutted.

Comment: In Section XVII.A - Macro-scale models, such as those used by FEMA, are meant to provide high-level planning estimates of flood conditions and do not always provide an

accurate site- specific depiction of flood conditions at a particular site. Therefore, **NAIOP believes that the ability to revise the boundary of LSCSF from the FEMA maps should be available to both the Commission and the applicant, as it is in the WPA, based on engineering calculations completed by a registered professional.**

- Response: Nothing in the regulations would prohibit the Commission or an Applicant from providing site specific information that revises the boundary of LSCSF based on existing topography and engineering calculations, as is currently permitted under the Act.

Comment: In Section XVII.A - There are many places where word selection indicates an assumption that projects will have a negative impact on LSCSF. In Boston's case, where the majority of projects that come before the Commission are redevelopments, that is simply not the case. **NAIOP believes that it would be more accurate to use terminology that is neutral about the impact a project may have on LSCSF.**

- Response: Staff cannot respond to this comment without more specificity or exact citations to the regulations.

Comment: In Section XVII.B - There are several references to considering the climate change impact of extreme heat. It is not clear how that is related to the interests that may be protected by LSCSF.

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: In Section XVII.B - The adaptations proposed in Climate Ready Boston are meant to eliminate LSCSF. This is supported by the fact that the recommended height of the proposed district-scale flood protection measures is ABOVE the 1% annual chance flood BFE for 2070. **It would not be possible to improve and/or enhance a resource area that is proposed for elimination. This situation needs to be addressed more clearly in the regulations.**

- Response: Staff cannot respond to this comment without more specificity or exact citations to the regulations.

Comment: In Section XVII.E.10 - While NAIOP supports the sentiment of Section 10 (and the requirements themselves), It is not clear how freeboard requirements are related to protection of LSCSF. While the interest of "storm damage prevention" does pertain to building damage, this seems more like a building code, or possibly a zoning issue.

- Response: Elevating critical equipment, which can be powered by hydrocarbons or contain other chemicals, helps prevent flood water contamination and reduces the potential for floatables. Staff also recommends the Resource Area Value of mitigation to the impacts of climate change be added to the Resource Area Values in Section XVII(A).

Comment: In Section XVII.F.2 - The "improvement" performance standard for redevelopment should require improvement (over existing conditions) of the capacity of

LSCSF to protect at least one of the relevant interests of the Ordinance without having to improve each and every interest.

- Response: Staff does not have enough information to make a recommendation. Further elaboration on the comment is needed.

Comment: In Section XVII.F.2 - NAIOP has concerns about the potential for projects not ordinarily subject to the Massachusetts Department of Environmental Protection's stormwater standards to become subject to those standards if they include alteration of LSCSF. NAIOP hopes that the Commission will consider including clarifying language in the draft regulations indicating this is not the case.

- Response: Staff recommends incorporating this comment in a revised draft.

Comment: Section XVII.F. of the regulations sets forth different standards for redevelopment within previously developed LSCSF. Redevelopment is defined as "work or activity that constitutes previously developed or degraded areas prior to December 19, 2019." For clarity, we would encourage the Commission to produce a map which illustrates where these provisions apply. This would reduce confusion when an area may have been previously disturbed by filling or other infrastructure but has returned to a natural or natural looking state.

- Response: Staff recommends this comment be incorporated into a revised definition of redevelopment.

## **Comments on Timeline/Effective Dates:**

Comment: In XIV.E., asks "Why are effective dates different across the various sections of the regs?"

- Response: This was specifically requested by the Commission.

## **Comments on Waivers:**

Comment: "We recommend that the regulations include a provision allowing the Commission to waive requirements when an Applicant demonstrates no adverse effect on the ability of the resource areas to protect the values of the Ordinance. Allowing waivers will avoid unforeseen consequences, as it is not possible to predict all possible future circumstances and contexts in which a proposal may not meet certain provisions of the regulations, but still may not be impactful or may even be beneficial."

Comment: A Better City recommends further clarity regarding the scope and type of resilience projects that the Commission may approve at their discretion. For example, we recommend that the regulations include a provision allowing the Commission to waive requirements when an Applicant demonstrates no adverse effect on the ability of the

resource areas to protect the values of the Ordinance. This would allow the Commission to provide some flexibility in addressing unforeseen consequences and would also provide more opportunity for Applicants to be creative and innovative in their design, while also protecting vital wetlands and critical habitat.

Comment: At the June 10 hearing, there appeared to be support for the inclusion of a waiver provision. NAIOP members include former Conservation Commission members, who stress that retaining flexibility as a matter of public policy is critical to the efficient operation of the Commission and will avoid potential unintended consequences. There are waiver provisions in many local bylaws. NAIOP is concerned that if there is not a waiver process in place, there may be unforeseen circumstances that arise which are not anticipated, in which a proposed project would be beneficial to the protection of interests in the Ordinance, but would not be allowed to move forward because of strict provisions in the regulations. The waiver provision provides the Commission with the discretion to waive certain performance standards provided that the proponent can demonstrate by a preponderance of evidence that the goals of the Ordinance are still achieved. The waiver is not intended to relax performance standards, but to make an adjustment when the performance standards may restrict certain design components. The Wetlands Act and its regulations address this through the use of limited projects to allow for access to uplands of public ways, cleanup of hazardous materials, utility connections, and similar projects. NAIOP also recommends that the waiver provision require a specific finding by the Commission that the work will enhance the overall protection of the interests of the Ordinance and goals of the Ordinance.

Comment: Suggested language for such a provision is respectfully submitted, in italics, below:

- A. *A waiver of the regulations may be granted if the Commission finds that with the issuance of the waiver the Project will contribute to the protection of the interests and wetland values protected by the Ordinance; or if the Project promotes an overriding public interest; or if evidence is presented that the strict application of the Bylaw or regulations will restrict the use of the land so that it constitutes an unconstitutional taking without compensation.*
- B. *Requests for waivers shall be made in writing and submitted with the NOI application..The request shall include, at a minimum, the information required and identification of all provisions of the Ordinance and regulations from which a waiver is requested and shall include.*
  - a. *An alternatives analysis;*
  - b. *A description of mitigating measures to be used to contribute to the protection of the wetland values protected by the Ordinance;*
- C. *Evidence of an overriding public interest associated with the Project when applicable;*  
*or*
- D. *Evidence of an unconstitutional taking without compensation;*

where applicable.

- Response: Multiple comments on waivers were received. Neither the Wetlands Protection Act, and associated implementing regulations at 310 CMR 10.00, nor the Boston Wetlands Ordinance include provisions regarding the use of waivers. Staff would not recommend the Commission incorporate waiver provisions into the regulations.

## **Comments on Climate Resilience:**

Comment: As currently drafted, A Better City is concerned that there are some aspects of the draft Phase II regulations that may hinder Boston's ability to implement vital climate resilience projects. The proposed draft Phase II regulations must ensure alignment with other climate resilience policy processes occurring within the City, like the Coastal Flood Resilience Overlay District, and implementation of Climate Ready Boston projects, while also allowing for creative and innovative developers to prioritize climate resilience across their projects.

- Response: Development of these regulations have been coordinated with the Climate Ready Boston team and the Boston Planning and Development Agency. Alignment with the Coastal Flood Resilience Zoning Overlay District will be part of the Phase III regulation process.

Comment: in Section XVII.B - The term "design life of the project" is not defined in these regulations, previously adopted regulations, or the Ordinance itself. A project is comprised of many components, many with different "design lives," and the regulations should provide clarity around what project components should be considered.

- Response: Staff recommends this comment be addressed in a revised draft.

Comment: Although the Phase II regulations begin to implement important aspects of the Ordinance, we urge the Commission to make timely progress in promulgating the forthcoming and long overdue "Phase III" regulations addressing climate resilience and environmental justice...Given that it will still be some time before the Phase III regulations that address climate resilience and climate equity are promulgated—possibly as long as another year or more—the Conservation Commission must take steps now to incorporate consideration of climate change impacts into its review and approval processes.

- Response: Phase III of the regulations is currently underway and separate from this process.

Comment: It is unclear from the current language whether applicants are required to also take into account the overall effect loss or alteration of the resource would have on climate resilience. The applicant should be required to provide that analysis (e.g., how will loss or alteration of the resource affect precipitation-based flooding, heat island, drought resilience, etc. onsite and in surrounding areas).

- Response: Staff recommends this comment be incorporated into a revised draft.

## **Comments on Protection vs Replication of Resource Areas:**

Comment: IVWs and VPs are critical to biodiversity and overall climate resilience. In an already densely-developed city like Boston, these natural areas should be fully protected without exception. Alteration should not be allowed even with replacement, replication, or mitigation. Several years ago, the New England Center for Investigative Reporting found that in many cases, wetlands replication projects either 1) were never built; 2) ultimately failed due to reasons like the of lack of suitable hydrology or prevalence of invasive species; 3) were much smaller than initially proposed/required; or 4) became polluted and degraded by their surroundings.

- Response: The regulations as drafted allow alteration at the discretion of the Commission. Staff recommends incorporating this comment into the Replication/Restoration section of the regulations.

Comment: In order to ensure the success of wetlands replication projects, the Commission should be prepared to commit to ongoing monitoring and oversight, including site visits to observe conditions and confirm that replication requirements have been met. Given the Commission's limited resources, this seems like it would be a significant challenge; however, without such oversight, it would not be possible to ensure success of replication projects. Lack of robust oversight would likely lead to an overall net loss of critical wetland resource areas throughout the City, which would undermine the intent of the Ordinance. Due to the fact that these "replications fail to produce the range of values – in quantity and quality – of the wetlands they ostensibly replace," the Sudbury Conservation Commission places a heavy presumption against plans which require wetlands replication. We strongly urge Boston's Conservation Commission to follow suit and to firmly protect these invaluable natural resources.

- Response: Staff recommends incorporating this comment into the Replication/Restoration section of the regulations.

Comment: We believe that the resource areas should be fully protected and replication/restoration should not be allowed as a way to gain approval for altering an IVW. In the event replication/restoration is allowed as a substitute measure, there should not be any circumstances in which work in IVWs is allowed without replication or restoration. Allowing alteration of small portions of IVWs without any corresponding compensation to the local environment could result in "death by a thousand cuts"—whereby many small alterations might cumulatively have a significant negative impact.

- Response: The regulations as drafted allow alteration and replication/restoration at the discretion of the Commission.

Comment: Again, we believe that the resource areas should be fully protected and replication should not be allowed as a way to gain approval for altering the resource area.

That being said, we are particularly concerned about the language in the draft regulations that would allow applicants to demonstrate, and the Conservation Commission to determine, that replication is not feasible and therefore the applicant may restore or improve “those portions of the affected resource area that are not affected by the proposed activity or work.” Part II, Section XIV(D)(4). This standard is far too ambiguous. There will be sites where no portion of the affected resource area is “not affected by the proposed activity or work;” in other words, a site’s entire respective resource area will be affected by the proposed activity. And at these locations, this ambiguity in the regulations could allow for the destruction of valuable resource areas without consequences. Similarly, if the resource area is already in good condition and does not require restoration or improvement, this provision would potentially let applicants off the hook entirely without providing any corresponding compensation to the local environment.

- **Response:** The regulations as drafted allow alteration and replication/restoration at the discretion of the Commission.

## **Comments on Science/Restoration Project Review Process:**

Comment: The Commission should do everything it can to encourage the projects that will help us to mitigate climate change impacts in the future. Toward this end, we suggest that the Commission consider adding language to this section [Section XVII.E.9.viii. ] that would (1) exempt instrumentation that is needed to study coastal conditions and processes, as scientific information and data should be encouraged to be pursued and installed, resulting in better science-based information to inform policies and decision-makers in the future; and (2) create a separate regulatory section/framework to promote and incentivize additional scientific exploration and experimentation, creating a streamlined process that will allow and promote innovative scientific studies. One example could be to create a sub-section similar to the “limited project” provisions of the Wetlands Protection Act regulations (310 CMR 10.24(7)), allowing the Commission to waive performance standards for projects whose sole purpose is to conduct scientific research and experimentation. Further conditions on such a regulatory structure could include a requirement that the scientific research be conducted by, or in collaboration with, a university, scientific organization, or non-profit organization.

- **Response:** The Regulations under the Ordinance cannot be weaker than the Wetlands Protection Act. LSCSF is a WPA regulated resource area and any activity within LSCSF must follow all of the established WPA procedures and regulatory process.

Comment: “we again bring to the Commission’s attention the need to establish a review process for beneficial projects which does not unduly burden applicants, especially non-profit organizations working with the City of Boston and Commonwealth on resource protection and improvement projects, both inland and along the coast and waterfront. We believe practical alternatives exist to put beneficial project review procedures in place, and

request that part of immediate next steps include discussion and resolution of this issue.”

- Response: Any work occurring within an area subject to protection under the Wetlands Protection Act, must follow the existing procedures and process. Staff recommends the Commission consider an administrative process for locally jurisdictional resources in future phases.

Comment: Additionally, the regulations should include a simple, streamlined process for the approval of projects that are undertaken for the purpose of restoration and/or improving climate resilience, including activities like wetlands restoration/construction, invasive species management, and nature-based solutions to flooding.

- Response: Any work occurring within an area subject to protection under the Wetlands Protection Act, must follow the existing procedures and process. Staff recommends the Commission consider an administrative process for locally jurisdictional resources in future phases.

Comment: Given the immediate threats of climate change, we suggest that you consider the addition of a new category of project, which, instead of requiring mitigation for their impacts, can instead be fast-tracked because of their protective beneficial impacts in response to climate change. We are encouraged that the Commission has reserved the discretion to approve projects “that are designed to reduce the risk of coastal flooding, inland flooding, extreme weather events, SLR, and other adverse impacts of climate change, including, but not limited to, strategies and plans described in Climate Ready Boston or any successive initiative of the City.” Section XVII.E. 9.viii. Addressing climate change will require the use of innovative projects which improve coastal resilience, including those set out in the Climate Ready Boston reports. These types of projects, including those envisioned by the Stone Living Lab, may include nature-based solutions/approaches that should be monitored for their efficacy. Toward this end, we suggest that the Commission consider adding language to this section that would:

1. exempt instrumentation needed to study coastal conditions and processes, as scientific information and data should be encouraged to better-inform policies and decisions in the future; and
2. create a separate regulatory section/framework to promote and incentivize additional scientific exploration and experimentation, creating a streamlined process that will allow and promote innovative scientific studies. One example could be to create a sub-section similar to the “limited project” provisions of the Wetlands Protection Act regulations (310 CMR 10.24(7)), allowing the Commission to waive performance standards for projects whose sole purpose is to conduct scientific research and experimentation. Further conditions on such a regulatory structure could include a requirement that the scientific research be conducted by, or in collaboration with, a university, scientific organization, or non-profit organization and that research be interrupted if negative impacts are being monitored and before-experiment conditions restored.

We strongly believe that creating a streamlined review process for research and experimentation will have positive and wide-ranging benefits to the broader community.

- Response: The Regulations under the Ordinance cannot be weaker than the Wetlands Protection Act. LSCSF is a WPA regulated resource area and any activity within LSCSF must follow all of the established WPA procedures and regulatory process.

## **Misc. Technical Comments:**

Comment: In response to “re-seeding plantings, transplanting, and new plantings” in XVI.B.1, asked “What does this mean?” Also asked “Why require all three of these; all may not be appropriate for every circumstance. Add ‘as appropriate’ after ‘shall combine.’”

- Response: This provision refers to the use of seeds, transplanted, and new plantings. Staff recommends this be clarified and incorporated in a revised draft.

Comment: Also in XVI.B.1, in response to “Invasive species and poor soils shall be removed,” asked “From where? The restoration area? Or the transplanted materials?”

- Response: Provision is in reference to the restoration area. Staff recommends this be clarified in a revised draft.

Comment: In XVI.B.3, asked if “restored” “is supposed to be ‘impacted.’”

- Response: Staff recommends that this comment be incorporated into a revised draft.

Comment: Certain sections of the draft regulations imply broader jurisdiction beyond the resource area and/or associated buffer zone. Other areas seem to require evaluation of project work in the context of jurisdictional areas beyond those that are the subject of the particular section. We request that these sections be clarified to: 1) limit their applicability to the relevant resource area/buffer zone being addressed in a particular section; and 2) limit the analyses required to the particular resource area being addressed in a particular section. Doing so will result in clear jurisdiction, and will also avoid readers potentially missing a requirement by having requirements for unrelated areas embedded in these resource area sections.

- Response: The Commission’s jurisdiction is clearly defined in the Ordinance and existing Regulations.

Comment: Prohibiting the impact to resource areas in ACEC is extremely limiting. At a minimum the presence of potential existing degraded/developed conditions should be considered. Projects should also be allowed to demonstrate no adverse effect to the Ordinance resource values. We are aware anecdotally that MassDEP may be considering revising this similar BVW prohibition in its regulations, due to unforeseen consequences that have arisen.

- Response: Staff recommends this comment be incorporated into a revised draft for Section XVII, specifically.

Comment: The criteria listed in the draft regulations for when work will be allowed in resource areas are highly technical (e.g., not impair the capacity of the VP to provide wildlife habitat; not result in flood damage due to filling that causes lateral displacement of water; not result in any adverse effect on public/private water supply or groundwater supply; etc). The regulations should require that these determinations be made by a qualified expert; an assertion by the project proponent that the criteria will be met is not sufficient.

- Response: Staff recommends this comment be incorporated into a revised draft.

Comment: There should be stronger standards for maintaining mature trees that have six-inch or larger diameters at breast height; replacement of trees should be a last resort option available only when preservation of existing mature trees is not possible. If trees of any size are removed, replacement at the same or greater total diameters at breast height should be mandatory, not at the Commission's discretion.

- Response: The City of Boston Parks and Recreation Department is currently engaged in developing an Urban Forest Plan. Through that process the City will create a strategic plan that is based on science, and defined by the needs and desires of the community.

Comment: This section of the regulations [VII - Restoration Provisions] should include language giving the Commission authority to require tree planting specifically.

- Response: Staff recommends this comment be incorporated into a revised draft.

## **Other Comments:**

Comment: I am willing to risk the added risk of insect borne disease. I love the cool green shade and water.

- Response: The Suffolk County Mosquito Commission provides essential services to control insect populations that may be vectors for insect borne disease.

Comment: Drainage must be managed somehow

- Response: The Boston Water and Sewer Commission manages the majority of the city's stormwater infrastructure.

Comment: Finally, A Better City recommends working with the Boston Water and Sewer Commission to help manage stormwater in the City and to ensure that regulatory language in the Wetlands Ordinance does not prevent us from implementing vital stormwater provisions. In addition to considerations around preventing flood inundation into the City during storm events, the Ordinance must also consider the need for draining of coastal and

inland flooding from the City during storm events and extreme precipitation. Coordination of flood maps and relevant stormwater data with the Conservation Commission and the Boston Water and Sewer Commission will be essential in protecting our City, and especially in prioritizing our frontline communities as we address climate risks. Further data from the Boston Water and Sewer Commission's storm inundation viewer may be helpful in informing the Phase II regulations relevant to LSCSF, in particular.

- Response: The Commission currently works and will continue to work closely with the Boston Water and Sewer Commission.

Comment: We also again bring to the Commission's attention the imperative of greatly improving Commission practice with respect to meaningful public notice, proactive and affirmative early engagement during project review with stakeholders, proponents and City Departments especially BPDA and BWSC, timely posting and updating of all project materials, development of clear written site visit, ex parte, and recusal policies, and the critical need to advance climate, climate equity, and environmental justice actions into the Commission's work plan, including its land stewardship responsibilities.

- Response: This comment does not pertain to this phase of regulation development.

Comment: Finally, we note the long-standing vacancy of one appointed Commissioner nominated by designated groups, and raise the question of whether the Commission should consider and adopt any regulations in the absence of one of two members specifically identified in the enabling legislation.

- Response: This comment does not pertain to this phase of regulation development.

## **Additional Comments Received:**

These additional comments were received but Staff does not recommend they be incorporated into the revised regulations at this time.

Comment: In XVII.B.4, **"add 'as relevant'"** after "...the Applicant's inclusion of resilience and adaptation planning in the design and proposed construction of the project..." and **"add 'as appropriate'"** after "An Applicant's failure to take into account Impacts of Climate Change and incorporate mitigation, resiliency, and/or adaptation to the Impacts of Climate Change..."

Comment: In XVII.E.3, **change "on said area's ability to provide" to "on the interests of..."** To be clear that LSCSF doesn't need to continue to provide those interests (eg if it is filled or cut off) as long as there is not an adverse effect."

Comment: in XIV C - NAIOP suggests that the draft regulations be amended to **remove the language "posing a significant threat to alter an IVW" found in this section**, as the presumption should be limited to work within the buffer zone to the IVW being altered.

Comment: In XVII.B.3, said to **delete “at a minimum” “here and if occurs elsewhere in this context. Implies that more may be required, whereas applicants should be able to rely on the data listed.”**

Comment: In XVII.D, in reference to “or posing a significant threat to alter,” said “Our understanding is that there is no bz to LSCSF in the Ordinance, **so this should be struck.**”

Comment: **Strike “or reasonably anticipated” and “or expected conditions due to climate change”** from XVII.C.2. “LSCSF is present day floodplain; this section shouldn’t reference future flood conditions; that is the CFRZ.”

Comment: Also for XIV.D.12, **“Suggest eliminating the #12 and keeping the narrative as part of #11, so it is clear that it is in relation to IVW only.”**

Comment: in Section XV.B - In order to ensure there is a process in place for potential conflicts of opinion, NAIOP suggests the following language be added to the end of (B)(6). **In the event of a conflict of opinion, the applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations, as to the probable extent of said Buffer Zone. Said calculations shall be prepared in accordance with 310 CMR 10.57(2)(a)6, or as vernal pool boundary engineering calculations may be otherwise updated in 310 CMR 10.00.**

Comment: In XV.D.8, **“add ‘as appropriate’”** after “An Applicant’s failure to take into account Impacts of Climate Change and incorporate mitigation, resiliency, and/or adaptation to the Impacts of Climate Change...”

Comment: In XV.D.7, **“add ‘as applicable’”** after “The NOI shall propose specific mitigation against and/or adaptation to the Impacts of Climate Change to Vernal Pool and Vernal Pool Habitat, such mitigation and/or adaptation to include...”

Comment: **Strike “depression” in XV.B.8.i and “growing in a dry depression”** in XV.B.8.iv as they are “already addressed by #8 intro.”

Comment: In XIV.D.11., **“Add ‘as applicable’”** after “The NOI shall propose specific mitigation against and/or adaptation to the Impacts of Climate Change to IVW, such mitigation and/or adaptation to include...”

Comment: Suggest **changing “by an individual who at least meets the qualifications outlined in 310 Code Mass. Regs 10.60(1)(b)” in XV.C.2 to “competent individual.”** Argue that “This is an overly burdensome criteria for evaluating vernal pools. In its original context the requirement relates to evaluating whether projects will have an adverse effect on wildlife habitat, which is more complex than evaluating whether an area functions as a

vernal pool. Vernal pool evaluations are discreet and readily performed by competent individuals who do not meet this criteria.”

Comment: In XVI.B.2, **“add ‘if necessary’” at the end.**

Comment: In XVII.C.3, “add ‘or by engineering calculations completed by a Registered Professional Engineer’” after “...including the best available data provided by the City or the Commonwealth of Massachusetts”

Comment:in Section XV.C – NAIOP suggests the following change in (C)(2): *Where an area has been determined by the Commission to meet the definition of Vernal Pool, including the adjacent area known as Vernal Pool Habitat, the Commission shall presume that said area performs essential habitat functions. This presumption is rebuttable only upon the presentation and preponderance of credible evidence that the basin or surrounding area does not provide essential habitat functions. Any evaluation of whether said area provides essential habitat functions should be performed by ~~an individual who at least meets the qualifications outlined in 310 Code Mass. Regs. 10.60(1)(b).~~ a competent individual.* As currently written, this is an overly burdensome criteria relating to evaluating whether an area functions as a vernal pool – not how it will be affected by a project. Vernal pool evaluations are discreet and readily performed by competent individuals who do not meet the criteria as currently drafted. For instance, a professional wetland scientist with over 15 years of experience would not qualify unless they also had the required Masters in Wildlife Biology/Ecological Science and may not be considered as having two years of experience performing wildlife habitat evaluations in the context of this section of the reference regulations, despite having engaged in and completed vernal pool evaluations for their entire career.

Comment: **Strike “based on the best available data and projections of SLR,”** added “This is already (and more clearly) addressed in ii below).”

Comment: We propose that the Commission make the following change to the proposed language highlighted above (Section XVII.E.3), to address this concern and allow for greater flexibility around this issue and focus the regulation on the LSCSF: “. . . so long as the activity will not have a significant adverse effect on ~~said area’s ability to provide~~ storm damage prevention and flood control; provided further that the activity or work incorporate best management practices to the extent necessary to reduce or eliminate damage resulting from ~~SLR and coastal storms~~ the base flood event used to determine the boundary of the LSCSF.”

Comment: In XIV.D.12, **“Add ‘as appropriate’”** after “An Applicant’s failure to take into account Impacts of Climate Change and incorporate mitigation, resiliency, and/or adaptation to the Impacts of Climate Change...”

Comment: We are requesting that the following change be made to the proposed Regulations Section XVII.E.4: revise the referenced language to add the underlined language in the following “...flood waters and waves, **unless it is demonstrated that such proposed activity or work has no adverse storm damage or flood control impacts, including by incorporating appropriate mitigation.**”

Comment: “Add: **‘..., or another IVW or BVW area sited in accordance with XIV.D.2.iv.’** This will avoid limiting restoration options and allow for more meaningful restoration opportunities.”

Comment: Argues that XIV.D.9 is “extremely limiting and doesn’t consider degraded/developed conditions. We’ve also heard anecdotally that MassDEP is considering changing this similar BVW provision. There are unforeseen consequences to this limitation.”

Comment: Noted that XVII.B.2 “seems more appropriate for the preamble.”

Comment: In XV.B.6. **“Add ‘In the event of a conflict of opinion, the applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations, as to the probable extent of said habitat. Said calculations shall be prepared in accordance with 310 CMR 10.57(2)(a)6, or as vernal pool boundary engineering calculations may be otherwise updated in 310 CMR 10.00.’** to the end.

Comment: Also in XV.B.8, **“Add ‘if impacts to the Vernal Pool or Vernal Pool Habitat are proposed’”** after “during Vernal Pool breeding season.”

Comment: Argues that XV.D.2.vi is “overly constraining, esp. For Vernal Pool Habitat, which may occur in previously developed/degraded areas beyond those already listed in the vernal pool definition exclusions.”

Comment: in Section XV.D - NAIOP believes that (D)(2)vi should be struck given that it is overly constraining, especially for Vernal Pool Habitat, which may occur in previously developed or degraded areas other than those listed in the vernal pool definition Exclusions.

Comment: In Section XVII.B - Filling in LSCSF typically does not cause lateral displacement of water. The assumption of displacement should be stricken from the proposed regulations.

Comment: In Section XVII.C - It will often be the case that LSCSF is NOT significant to the interests of the Ordinance. The regulations should spell out what information is needed to rebut this assumption.

Comment: In XVII.E.4, said that “shall not impact the ability of the area to receive, hold, and laterally spread flood waters without causing unnatural redirection, refraction, diffraction, or reflection of coastal flood waters and waves” is “Problematic because some projects will incorporate flood mitigation strategies that result in filling the floodplain/berming it off, for example; don’t want to preclude that where it is shown to have no adverse effect and/or be beneficial.”

Comment: In response to XVII.E.9.viii, “Clarify herein or add new category in this section to specify that flood mitigation associated with development or other projects is also allowed, and that work that doesn’t have an adverse impact is allowed. Right now as written - only allows the portions of a project that are related to flood mitigation.”

Comment: In XVII.E.10, highlighted “substantial improvement” and asked “How is this defined?”

Comment: A Better City recommends that the flood maps upon which this Ordinance is based are using the most up-to-date flood projection data available, and that these maps are aligned with the flood projections and planning found within Climate Ready Boston, as well as the Coastal Flood Resiliency Zone, the Inland Flood Resiliency Zone, the Boston Water and Sewer Commission, and additional future resilience regulations that seek to address coastal storm flooding impacts. It is our understanding that the Ordinance does not require the use of FEMA maps as they relate to LSCSF. However, we are concerned that the current draft Phase II regulations do in fact reference FEMA flood maps (which are known to be outdated, based on historic data, and do not adequately incorporate existing flood protection measures), rather than more accurate depictions of current flooding risks in Boston based on most recent data. LSCSF should be focused on areas that would fall within current 100-year flood events and addressed within the Coastal Flood Resilience Zone, which would not preclude the Commission’s ability to regulate future 100-year storm events.

Comment: We note initially that the regulations define LSCSF using FEMA maps, which are based solely on historical inundation and do not account for increased inundation as a result of climate change. The City has already created projected 100-year storm maps based on data that take climate change impacts into account. We suggest that the Commission to consider using the more inclusive of these forward-looking maps and the FEMA maps to define the LSCSF. Language could be added that creates a presumption that, for example, the more inclusive maps be used to define LSCSF, and that the presumption could be overcome upon clear and convincing evidence from a credible professional source (e.g. NOAA). It is our understanding that based on the modeling used to project these areas, the forward-looking maps may at times be less-inclusive than the FEMA maps. In this case, the more inclusive of the two should be used to define the resource area. Many projects that will be permitted under these regulations have an expected life span of fifty years or more. Future flooding events will impact new areas of the City and projects in these areas

should be required to undergo the same review as projects in areas that currently flood in much the same way that the flood zoning overlay proposed by the Boston Planning and Development Agency extends beyond the extent of current flooding.

Comment: The Ordinance provides the following definition for Coastal Storm Flowage: “Land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record, or storm of record, whichever is greater.” City of Boston Code, Ordinances, Chapter 7, §1.4(b) (2019). The proposed Phase II regulations would define this region as the Area of Special Flood Hazard under FEMA’s Flood Insurance Rate Maps (“FIRM” or referred to collectively as “FEMA maps”). As noted in our previous comment letter and CRWA’s public testimony during the June special hearing, we strongly object to the usage of FEMA maps in defining LSCSF. FEMA maps are based solely on historical inundation data and do not account for increased inundation as a result of climate change. FEMA maps are also widely regarded as outdated and inaccurate because they do not take dynamic considerations like erosion or wave height and velocity into account. We understand that the Conservation Commission intends to address climate change inundation projections through the Coastal Flood Resilience Zone within the Phase III regulations and therefore believes that FEMA maps can be used to appropriately define the boundaries of the LSCSF resource area. As discussed below, we believe this approach is severely inadequate for several reasons and instead urge the Commission to incorporate the City’s own Climate Ready Boston data into the definition of LSCSF.

Comment: A Better City also recommends that the Wetlands Ordinance Phase II Regulations include provision for flood protection infrastructure like berms, which can include an array of grey, green, and hybrid climate solutions to reduce flooding and increase critical habitat. We are concerned that the draft LSCSF regulatory language will unnecessarily preclude vital flood mitigation strategies in Boston. Sections XVII.E.3 through 5, 11, and 12 do not allow for Applicants to demonstrate “no adverse effect” and also prevent flood mitigation strategies that would involve filling and incorporating berms into areas of the floodplain. The change in these provisions would see some of Boston’s most creative and resilient development projects denied permitting.

Comment: Recent studies indicate that FEMA maps are “badly out-of-date” and do not accurately portray current flood risk throughout many flood prone portions of the nation. According to First Street Foundation, 8.7% more properties are currently at risk of flooding than portrayed by FEMA’s projections. In addition to their inability to accurately portray current flooding risk, FEMA maps are unlikely to be timely updated. Although required by law to periodically update flooding risk projections, FEMA often falls “woefully short” of this goal. As the rate of coastal inundation increases due to climate change, FEMA’s data will become even more inaccurate and eventually obsolete.

The Ordinance does not require the usage of FEMA maps to define the boundaries of the

LSCSF resource area. In fact, the Ordinance requires the use of “best available data” with respect to flooding and storm damage risks:

Flood Control. The prevention or reduction of flooding and flood damage, both as currently expected to occur and as projected to occur based on the *best available data* regarding the impacts of climate change.

Land Subject to Flooding or Inundation. ... The Commission shall give special consideration to the *best available data* provided by the City of Boston and the Commonwealth on expected conditions due to climate change.

Storm Damage Prevention. The prevention of damage caused by water from storms, as currently occurs and is predicted by *best available data* to occur from the impacts of climate change, including but not limited to erosion and sedimentation, damage to vegetation, property or buildings or damage caused by flooding, waterborne debris or waterborne ice.

City of Boston Code, Ordinances, Chapter 7, §1.4(b) (2019) (all emphasis added). Thus, in order to follow the intentions of the Ordinance, the Commission must not rely on FEMA’s outdated and inaccurate projections.

Comment: The proposed Phase II regulations do provide a “fail-safe” option to incorporate alternative data “[i]f [FEMA’s] data is unavailable or deemed by the Commission to be outdated, inaccurate, or not reflective of current or reasonably anticipated conditions.” Part II, Section XVII(C). Under these circumstances, the proposed regulations would allow the Conservation Commission to instead “[determine] the boundary of LSCSF [...] from other evidence, including the best available data provided by the City or the Commonwealth of Massachusetts on expected conditions due to climate change.” *Id.* However, this should be the standard, not the exception. We strongly urge the Conservation Commission to remove the proposed Phase II regulation’s presumption in favor of FEMA’s maps entirely; FEMA maps simply cannot define the boundaries of the LSCSF resource area, as it is intended to function under the Ordinance, with suitable accuracy.

Comment: “More clarity as to the implementation and enforcement timelines associated with the Phase II regulations is needed, so that applicants can understand the earliest feasible time of application of these regulations on development projects in Boston. Especially since the timelines for implementation differ from the 60-day effective date for isolated vegetative wetlands, the 14-day effective date for vernal pools, and the 90-day effective date for Land Subject to Coastal Storm Flowage (LSCSF), clarity, consistency, and predictability for regulatory implementation will be vital to ensuring success. Regulations must affirm that projects that have already gone through MEPA regulatory review, Article 80 review, and others, are not suddenly beholden to this new set of regulations immediately upon passage. We suggest that the effective date of the Ordinance’s

regulations account for the need for local approvals, design time, and neighborhood/community stakeholder engagement, when possible.”

Comment: During the public hearing on June 10, it became apparent, as it has any time an issuing authority is adopting or amending its regulations, that it is important to pick a date to apply the regulations to new projects and to avoid applying the new provisions to projects that have been engineered for some time and have already proceeded through the lengthy review process. As the Commission is well aware, the City of Boston review process recommends early filings with the Boston Planning and Development Agency (BPDA) and early discussions with neighborhoods to incorporate design changes. With rare exception, filings with the Conservation Commission are later in the planning and review process. This sequence is incorporated in the Wetlands Protection Act (WPA) and in the Ordinance requiring that “obtainable” permits have been issued or at least applied for before a party applies to the Conservation Commission with a Notice of Intent or RDA. The Conservation Commission is one of the last steps. As an example, the large multi-use project in East Boston and Suffolk Downs, whose representatives spoke at the July 10 public comment session, has spent years in the planning process with neighborhood meetings and BPDA reviews prior to coming to the Conservation Commission with a phased project. With that in mind, **NAIOP recommends that the Commission consider adopting language which would establish the effective date for this phase to be for NOI’s that are filed within six (6) months of the Effective Date of this phase of regulations (or choose a date certain such as February X, 2022).** NAIOP also believes that there should be an exemption for projects which have gone through Article 80, BPDA review or MEPA so that they do not have to restart any aspect of their project planning process. To achieve this, NAIOP encourages the Commission to review the Effective Date language that was used for the Riverfront Protection Regulations in 1996 at 310 CMR 10.58(6). These regulations take into account the status of projects, allow for maintenance of existing public projects, including the MBTA, and incorporate similar language into the final Phase 2 Regulations.

Comment: We are not aware of any provision under either the Massachusetts Wetlands Protection Act or the Boston Wetlands Ordinance which would prohibit the Commission from incorporating climate change projections into the current Phase II regulations for LSCSF. However, as discussed below, the draft regulations rely on FEMA maps based on historical data to determine flooding risks. The Commission has indicated that the Coastal Flood Resilience Zone, which will be developed as part of the Phase III regulations, will address current and future inundation projections as a result of climate change. We cannot wait that long to address climate impacts; we strongly urge the Commission to incorporate climate change projections, using data and information the City already has, during this phase of rulemaking.

Comment: Rather than codify a single source of flooding projection data within the proposed Phase II regulations, we urge the Commission to rely on the “best available data” at any given time. We believe the City’s 100-year storm maps provided by Climate Ready

Boston studies currently meet this standard. Climate Ready Boston's data—which goes out as far as 2070—should be used to determine the 100-year storm inundation boundaries in the near term. As climate science evolves, so too will “the best available data.” Our understanding of flood risk has changed considerably in just the last few years. Flooding projections that were once labeled as extreme scenarios are now understood to in fact be of “moderate” probability. In addition, there is no indication in the scientific literature that this scaling up of impacts is going to stop. In fact, many conservative projections estimate that this rate may grow exponentially. Therefore, should the Massachusetts Coastal Flood Risk Model data, once it becomes publicly available, supplant the City's Climate Ready projections as the “best available data,” the Commission should update the boundaries of the LSCSF resource area accordingly. Most projects that are constructed in the City have an expected life span of at least fifty years. Many existing buildings in Boston are hundreds of years old. Near- and long-term future flooding due to climate change and its associated effects, such as storm surge, will impact new areas of the City. Projects in these areas should be required to undergo the same review as projects in areas that historically flooded.

Any questions or additional comments regarding the proposed regulations should be sent to [cc@boston.gov](mailto:cc@boston.gov). All public comments are available online at [boston.gov/conservation](http://boston.gov/conservation). The next anticipated hearing concerning the regulations will be on September 20, 2021.